Department of Veterans Affairs Veterans Health Administration Washington, DC 20420 VHA HANDBOOK 1173.9 Transmittal Sheet November 3, 2000

## FOOTWEAR AND SHOE MODIFICATIONS

- **1. REASON FOR ISSUE:** This Veterans Health Administration (VHA) Handbook updates Department of Veterans Affairs (VA) procedures for providing footwear and shoe modifications to veteran beneficiaries.
- **2. SUMMARY OF CHANGES:** This VHA Handbook updates current policies and procedures.
- 3. RELATED ISSUES: VHA Directive 1173, and VHA Handbooks 1173.1 through 1173.15.
- **4. RESPONSIBLE OFFICE:** The Chief Consultant, Prosthetic and Sensory Aids Service Strategic Healthcare Group (113), is responsible for the contents of this VHA Handbook. Questions may be referred to 202-273-8515.
- **5. RESCISSIONS:** VHA Manual M-2, Part IX, Chapter 11 is rescinded.
- **5. RECERTIFICATION:** This document is scheduled for recertification on or before the last working day of July 2005.

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### FOOTWEAR AND SHOE MODIFICATIONS

#### 1. PURPOSE

This Veterans Health Administration (VHA) handbook establishes uniform and consistent national policy and procedures in providing footwear and shoe modifications to veteran beneficiaries.

### 2. SCOPE

a. Arch supports, shoe modifications, functional foot orthotics, all inlay shoes, healing shoes, custom-made orthopedic shoes and alternative footwear shall be provided to beneficiaries who are eligible for prosthetic services in accordance with the policies and procedures contained in VHA Handbook 1173.1 and VHA Handbook 1173.2 and specific instructions contained in this Handbook.

**NOTE:** The footwear prescription criteria contained in Appendix A are the basis from which determinations are generally made to provide orthopedic footwear, shoe modifications, or orthotics.

b. All prescriptions for orthopedic footwear, modifications or functional foot orthotics will be reviewed by the Prosthetic representative, Chief of the Prosthetic Clinic Team, or designee, for program compliance. The authorization of appliances for conditions other than those stated in the prescription criteria contained in Appendix A will only be granted when the foot disorder cannot be accommodated or treated with the appliance listed. The most medically and cost-effective method for treatment of the disability will be used. Custom-made orthopedic shoes should only be authorized when all other footwear options have been considered.

## 3. DEFINITIONS

- a. <u>Arch Supports.</u> Custom or non-custom inlays fabricated for the purpose of providing relief from callosities and pressure points, and maintaining the integrity of the longitudinal arch and/or the metatarsal heads.
- b. <u>Functional Foot Orthotics.</u> Foot plates fabricated from plaster molds of the feet, or electronic (computer) imaging in a semi-weight bearing or non-weight bearing, neutral position with corrections built in to prevent abnormal compensation during the gait cycle.
- c. <u>Custom-Made Orthopedic Shoes.</u> Shoes fabricated over special modified lasts in accordance with prescriptions and specifications to accommodate gross or greater foot deformities or shortening of a leg at least 1 and 1/2 inches or greater.
- d. <u>Depth Inlay Shoes.</u> Prefabricated shoes with a higher toe box to accommodate for hammer toes and other deformities. This shoe may also accommodate the insertion of special inserts. All Depth Inlay Shoes include a 1/8 inch low-density insert.

- e. Ortho Inlay Shoes. Special shoes constructed over an extended last to permit the insertion of, and/or the addition of, individually prepared inlays, modified inserts or other orthotic supports to compensate for deformities on the plantar surface of the foot. Low-quarter shoes are available with foam-crepe soles and wedged heels on leather soles and rubber heels. The High Top Ortho Inlay Shoe is available with foam crepe soles or with leather soles and rubber heels. All Ortho Inlay Shoes are available with composite inserts, with or without covers.
- f. <u>Alternative Footwear.</u> A lightweight extra depth shoe generally used for diabetic and arthritic patients, e.g., any shoe constructed of leather or canvas with crepe soles or leather soles and heels.
- g. <u>Plastizote Healing Shoes.</u> Shoes made of fabric lined leather or plastizote, appropriate closures, double removable plastizote inserts to allow room for bandage (generally used for temporary healing purposes).
- h. <u>Orthopedic Outer Footwear.</u> Specially fabricated moisture-proof overshoes or rubbers designed to fit over modifications to custom-made orthopedic shoes.
- i. <u>Healing or Cast Shoes.</u> Shoes constructed of canvas and/or vinyl with rubberized bottoms with an extended front and/or rear velcro straps to permit full opening for the insert of swollen, tender or surgically treated feet.
- j. <u>Patterns.</u> Cardboard tracing (templates) comprising the shoe's upper and innersole components.
- k. <u>Last.</u> A form which is shaped like the human foot over which a shoe is manufactured or repaired.
- 1. **Shoe Modification.** Medically prescribed alterations to shoes to accommodate minor foot deformities, disabilities, or leg shortening of less than 1 and 1/2 inches.
- m. <u>VA Shoe Last Clinic.</u> Refers to selected VA Orthotic Laboratories listed in VHA Handbook 1173.2, Appendix C.

### 4. BENEFICIARIES

Beneficiaries issued orthopedic footwear are authorized to have two serviceable pairs at all times. However, one additional pair of either dress or work shoes may be authorized if required by the beneficiary's occupation due to the climate and environment of the work place or as other circumstances warrant.

#### 5. SHOE MODIFICATIONS

a. Shoe modifications; e.g., rocker soles, shoe buildups, metatarsal bars, shoe stretching, Thomas heels, tongue pads, velcro closures, modified lacers, long arch pads, etc., may be applied

to personally purchased shoes of an eligible beneficiary, upon medical determination of need, to compensate for minor foot deformities. These modifications may be indicated for pes planus, pes cavus, hammer toes, severe callosities, leg length discrepancies at least 1 and 1/2 inches, or present a similar problem which makes the wearing of unmodified shoes impossible.

- b. Shoe modifications to personally purchased shoes will be considered, and when recommended will be performed locally, or by the nearest Department of Veterans Affairs (VA) Shoe Last Clinic prior to issuing any type of orthopedic footwear at VA expense.
- c. Shoe modifications will be obtained from an authorized VA Orthotic Laboratory whenever practical; however, local commercial sources may be used when cost-effective to avoid a hardship on the beneficiary.
- d. When extensive modifications are required, the cost of which will exceed the cost of some types of orthopedic footwear, careful consideration should be given to furnish such foot-wear in lieu of the modifications.
- e. Repairs to a beneficiaries' self-purchased shoes will be limited to prescription modifications.

## 6. ORTHOPEDIC FOOTWEAR

- a. Inlay shoes may be furnished to eligible beneficiaries after it has been determined that shoe modifications will not accommodate the foot deformity and that an insole or additional space is necessary.
- (1) Inlay shoes may be ordered from commercial sources when cost-effective to prevent a hardship to the beneficiary.
- (2) Modification or repairs of the insole and/or inlay shoes should be done by the local VA Orthotic Laboratory. Facilities not having Orthotic Laboratories may request modifications from their nearest Shoe Last clinic. All requests for modifications must be initiated by a VA Form 10-2529-3 (ADP), Request and Receipt for Prosthetic Appliances or Services, clearly identifying the modification desired. The same ordering procedures may be applied electronically (Prosthetic Veterans Health Information Systems and Technology Architecture (VISTA) Program).
- (3) Replacements of all shoes will be authorized when repairs are no longer practical. Eligibility will be confirmed prior to initiating any replacement order by the referring station.
- (4) The issuance of spare shoes will be in accordance with the general policy for spare custom-made orthopedic footwear contained in subparagraph 6.i.(2).
- (5) VA facilities may be authorized to maintain a limited supply of the most common sizes of shoes to facilitate immediate patient care.

**NOTE:** Inventory control will be in accordance with VA policy and procedures contained in subparagraph 6d(3) of this Handbook.

- b. Healing and/or cast shoes may be authorized when medical determination has been made that the foot cannot be slipped into a standard shoe.
  - (1) Healing and/or cast shoes will be obtained from local commercial sources.
- (2) Modifications to healing and/or cast shoes will be done by VA Orthotic Laboratory or qualified commercial sources.
- (3) The issuance of replacement, authorization of spares, or repair of healing and/or cast shoes are not usually required since this type of shoe is normally needed for a short period of time.
- c. Alternative footwear may be authorized when a medical determination is made that no other type of shoe or modification will adequately accommodate the foot deformity or condition.
  - (1) Molded shoes may be purchased from established VA contracts.
- (2) Molded shoes will be replaced sufficiently in advance so as not to interrupt their use; the amount of repair that can be done to this type of shoe is minimal.
- (3) Spare molded shoes will be furnished in accordance with the general policy for spare orthotic footwear.
- d. Plastizote healing shoes may be furnished to eligible beneficiaries when medically indicated.
  - (1) Plastizote healing shoes may be obtained from commercial sources.
- (2) Modifications to plastizote healing shoes should be done by VA Orthotic Laboratories or qualified commercial sources.
- (3) VA facilities may be authorized to maintain a limited stock of the most common sizes of plastizote shoes to facilitate patient care. All requests for inventory must be initiated by memorandum from the Prosthetic representative. Inventory control will be in accordance with VA policies and procedures.
- (4) Replacement plastizote shoes may be authorized when necessary for the treatment of eligible beneficiaries. Spares will not normally be provided since these shoes are used for a short duration.
- e. Custom-made orthopedic shoes may be initially furnished to eligible beneficiaries upon receipt of a properly executed prescription. The orthopedic shoes will be custom fabricated at the VA Shoe Last Clinic or by a local contractor. Reasonable doubt regarding the patient's need for

orthopedic shoes will normally be resolved in favor of the beneficiary. In conflicting situations, the facts will be referred to the Prosthetic Clinic Team of the field facility for resolution.

- (1) Initial issues of custom-made orthopedic shoes are authorized when a physician or podiatrist determines that the severity of the foot condition is such that a lesser means, for example, inlay shoes, shoe modifications, etc., cannot adequately compensate for the deformity or there is a leg discrepancy length at least of 1-1/2 inches in length or greater.
- (2) Initial custom-made orthopedic shoes, lasts and patterns will normally be obtained when the severity of the foot disability requires the physical presence of the beneficiary for casts, measurements and possible trial fittings.
- **NOTE:** There will be no foot examination at a VA Shoe Last Clinic when the measurements and prescribed corrections can be transmitted by mail.
- f. VA Form 10-2908, Measurement for Orthopedic Shoes, will be used in conjunction with VA Form 10-2529-3 (ADP) to order initial orthopedic shoes. The same ordering procedures may be applied electronically (Prosthetic VISTA Program). *NOTE:* See clinical evaluation notes section in Footwear Program Guide for checkout procedure for custom orthopedic shoes.
- g. All orthopedic shoes are to be appropriately coded indicating: month, year of fabrication, and the source from a block of numbers in numerical sequence assigned to each VA Shoe Last Clinic or local contractor.
- h. Initial custom-made orthopedic shoes, lasts, and patterns will be obtained from the nearest VA Last Clinic when:
- (1) The severity of the foot disability requires the physical presence of the beneficiary for casts, measurements and trial fittings.
- (2) The measurement and desired corrections cannot be transmitted by mail and there are no qualified local contractors.
- **NOTE:** VA Form 10-2529-3 (ADP) will be used to order custom-made orthopedic shoes from the nearest VA Last Clinic. The same ordering procedures may be applied electronically (Prosthetic VISTA Program).
- i. Initial custom-made orthopedic shoes, lasts and patterns will be obtained from the local contractor.
- (1) Initial custom-made orthopedic shoes, lasts and patterns will be obtained from local contractors when mail transmittal of measurements and corrections is not feasible and the veteran cannot be transported to the nearest VA Shoe Last Clinic or, is economically in the best interest of VA. *NOTE:* VA Form 10-2421 (ADP), Prosthetic Authorization for Items or Services, will be used as the normal procurement document.

- (2) The facility will provide spare or repeat orders of custom-made orthopedic shoes when a VA Shoe Last Clinic has delivered a second pair of custom-made orthopedic shoes which are medically acceptable.
- (a) VA Shoe Last Clinics or local commercial contractors normally will provide replacement custom-made orthopedic shoes.
- (b) VA Shoe Last Clinics or local commercial contractors should retain the lasts and patterns after the second successful fitting of a patient.
- j. Continued service may be furnished by a VA Shoe Last Clinic when it has been medically determined that the severity of the foot condition requires personal fitting and examination prior to the fabrication of each additional pair of shoes.
- k. Local contractors may be used for the procurement of additional pairs of custom-made orthopedic shoes whenever replacements are warranted and the veteran has previously been furnished shoes through that source.
  - 1. Repairs to custom-made orthopedic shoes will be provided when required.
- m. Repairs for beneficiaries must be submitted by the medical center responsible for the beneficiary's treatment. VA Form 10-2529-3 (ADP) will be prepared. The same ordering procedures may be applied electronically (Prosthetic VISTA Program).
- n. VA Shoe Last Clinics will routinely provide repairs for permanent Shoe Last Clinic cases. Pre-addressed labels and mailing containers may be furnished to eligible beneficiaries to facilitate repair services. When shoes are referred from a field facility, VA Form 10-2529-3 (ADP) will be used to request repairs. Shoe Last Clinics may provide minor repairs to custom orthopedic shoes.
- o. Local sources should repair custom orthopedic shoes purchased from that source. Repairs to shoes provided by Shoe Last Clinics may be provided by local sources if mail transmittal is not feasible and the veteran cannot be transported to the nearest VA Last Clinic or it is economically in the best interest of VA.

## 7. ORTHOPEDIC OUTER FOOTWEAR

- a. Orthopedic outer footwear may be provided to eligible beneficiaries by VA when standard commercial stock outer footwear will not fit due to the unusual size and/or shape of the custom-made orthopedic shoe and the beneficiary is in an environment which may be damaging to the shoes.
- b. Commercially available outer footwear, which will accommodate the orthopedic footwear provided by VA, will be purchased by Prosthetic activities.

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# FOOTWEAR PRESCRIPTION GUIDELINES

| PATHOLOGY  | SHOE TYPE                                  | SHOE MODIFICATION                                   | INSERT<br>MODIFICATIONS  | COMMENTS  |
|--|--|---|--|---|
| HALLUX FIGIDUS (or<br>Metatarso-phalangeal joint<br>arthritis) | Commercially available standard last shoe. | Long steel spring and/or rocker modified sole.      | Modified steel or rigid plastic insole.  | If accompanied by other deformities, see recommendations for deformities. |
| AMPUTATED HALLUX<br>OR MULTIPLE DIGITS                         | Commercially available standard last shoe. | Long steel spring and rocker modified sole.         | Foot orthosis if imbalance is present; if shoe distorts, use toe prosthesis.                     | If foot orthosis is needed, extra depth shoe may be indicated.            |
| HALLUX VALGUS, MILD<br>TO MODERATE                             | Commercially available standard last shoe. | Bunion area relief by shoe stretching.              | Foot orthosis with functional control.   | In some instances, pain on motion may require a rocker modified sole.     |
| HALLUX VALGUS,<br>SEVERE                                       | Bunion-last shoe or custom shoe.           | Not usually needed when special shoe is prescribed. | Foot orthosis with functional control.   | Surgical intervention may be necessary.                                   |
| SHORT FIRST RAY  | Commercially available standard last shoe. | Not usually necessary.                              | Functional semi-<br>rigid inlay with<br>extension support<br>for hallux and first<br>metatarsal. | Metatarsal pad may be added to accommodate second metatarsal.             |

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| PATHOLOGY   | SHOE TYPE   | SHOE MODIFICATION   | INSERT  | COMMENTS   |
|---|---|---|---|--|
| HAMMERTOES OR TOE<br>CONTRACTURES ONLY                          | Commercially available shoe with high toe box.              | Not usually necessary.  | MODIFICATIONS  Metatarsal pad;  "crest" pad under proximal IP joint or joints. Foot orthosis with functional control. | Surgical correction may be necessary.  |
| FLEXIBLE INVERTED<br>HEEL                                       | Commercially available standard last shoe.                  | Rigid counter and shank. Lateral heel extension with lateral wedge. | Foot orthosis to control foot function.   | Neuromuscular involvement may require AFO with T-Strap.  |
| FLEXIBLE PES PLANUS,<br>MILD                                    | Commercially available standard last shoe.                  | Rigid counter and shank,<br>Thomas heel with medial<br>wedge.       | Functional orthosis, rigid or semi-rigid.   | Foot orthotic is usually best treatment.   |
| FLEXIBLE PES PLANUS,<br>SEVERE                                  | Commercially available standard last shoe.                  | Rigid shank or wedge sole.  | Foot orthosis of minimal value. Flexible insole usually indicated for accommodation only.                             | A patient with severe flexible pes planus may require surgical correction.   |
| RIGID PES PLANUS<br>(Immobile) or PERONEAL<br>SPASTIC FLAT FOOT | Commercially available standard last shoe.                  | Rigid shank.  | Foot orthosis to conform to deformity.  | If painful spastic pes<br>planus is present, in<br>absence of tarsal coalition,<br>frequent adjustments may<br>be necessary. |
| PES CAVUS MILD TO<br>MODERATE                                   | Commercially available standard last shoe of Blucher style. | Tongue pads, modified lacing methods.                               | Rigid, semi-rigid or accommodative foot orthosis.   | If pain is present, a mild, conforming foot orthosis may be indicated. (Do not restrict motion).                             |

| PATHOLOGY             | SHOE TYPE                            | SHOE MODIFICATION              | INSERT<br>MODIFICATIONS    | COMMENTS                   |
|-----------------------|--------------------------------------|--------------------------------|----------------------------|----------------------------|
| PES CAVUS: SEVERE     | Custom-orthopedic shoe may be        | Metatarsal bar may be          | Accommodative foot         | Severe deformities may     |
| RIGID (Schaffer Foot) | indicated.                           | indicated.                     | orthosis (Schaffer Plate). | require surgery.           |
| META-TARSALGIA OR     | Commercially available               | Metatarsal bar may be          | Foot orthosis with         | If unrelieved by           |
| INTERMETATARSAL       | standard last shoe.                  | indicated.                     | metatarsal elevation       | conservative treatment,    |
| NEURITIS              |                                      |                                | consistent with the        | check for neuroma.         |
|                       |                                      |                                | location.                  |                            |
| SEVERELY DEFORMED     | Custom orthopedic shoe.              | As may be indicated to relieve | As may be indicated,       | Modifications as may be    |
| FOOT                  |                                      | pressure areas.                | i.e., accommodative        | indicated. May require     |
|                       |                                      |                                | foot orthosis.             | surgery.                   |
|                       |                                      |                                |                            |                            |
| MECHANICALLY          | Commercially available               | Long arch pad.                 | Foot orthosis with         | Local injection of steroid |
| PAINFUL HEEL, HEEL    | standard last shoe with rigid        |                                | longitudinal arch          | may be considered if not   |
| SPUR, BURSITIS, ETC.  | shank.                               |                                | control and deep           | relieved by foot orthosis. |
|                       |                                      |                                | heel cup. Semi-rigid       |                            |
|                       |                                      |                                | or rigid foot              |                            |
|                       |                                      |                                | orthosis.                  |                            |
| SEVERELY LIMITED      | Commercially available               | Rocker modified sole, heel     | Foot orthosis and/or       | Achilles lengthening may   |
| DORSIFLEXION OF THE   | standard last shoe with              | raise to accommodate           | heel elevation when        | be considered in some      |
| FOOT ON THE ANKLE     | moderately higher than average heel. | equinus, when indicated.       | indicated.                 | instances.                 |
| PERIPHERAL            | Carefully fitted standard last       | Soft accommodation as          | Accommodative              | If foot is edematous,      |
| VASCULAR              | Blucher type flexible shoe. Soft     | indicated.                     | (Plastazote) inlay as      | adjustable open flap shoe  |
| IMPAIRMENT            | shoe for inpatient or home use;      |                                | indicated.                 | may be used.               |
|                       | e.g., Plastazote.                    |                                |                            |                            |

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| PATHOLOGY  | SHOE TYPE  | SHOE MODIFICATION   | INSERT<br>MODIFICATIONS                                  | COMMENTS   |
|--|--|---|--|--|
| LIMB LENGTH<br>DISCREPANCY LESS<br>AND 1-1/2 INCHES        | Commercially available standard last shoe.                       | Elevate heel and sole as indicated.   | Elevated half length insole as required.                 | In cases of long standing discrepancies, proceed with caution.   |
| LIMB LENGTH<br>DISCREPANCY<br>GREATER THAN 1-1/2<br>INCHES | Custom shoe to accommodate shortening or modify commercial shoe. | Modify shoe for almost the full discrepancy.  | Usually not possible.                                    | When extreme build-ups are required, rocker soles are indicated. |
| FOREFOOT<br>AMPUTATION<br>TRANSMATATARSAL                  | Custom shoe to accommodate shortening or modify commercial shoe. | Rocker modified sole may be indicated. High point just proximal to distal end of stump. | Soft partial foot prosthesis as indicated.               | Adjust as necessary.   |
| FOREFOOT AMPUTATION LISFRANC OR CHOPART                    | Commercially available high top shoe may be indicated.           | Rocker modified sole may be indicated.  | Soft partial foot prosthesis as indicated.               | Re-evaluate periodically.  |
| CHARCOT JOINT OF THE FOOT                                  | Extra depth shoe or may require custom shoe for Charcot joint.   | As indicated by deformity.  | Resilient accommodative insole as indicated.             | PTB-AFO/orthosis may be used to relieve weight stress on foot.   |
| MEDIAL-LATERAL<br>ANKLE INSTABILITY                        | Commercially available high top shoe (height as indicated)       | Shoe modified as indicated.   | Foot orthosis may be indicated to control foot function. | AFO is often required.   |